

Notice of Allowability	Application No.	Applicant(s)
	09/763,412	ARAKI ET AL.
	Examiner	Art Unit
	Ramsey Zacharia	1773

-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/20/4.
2. ☒ The allowed claim(s) is/are 1,4-7 and 9-17.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>attached</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Abraham J. Rosner on 16 March 2004.

The application has been amended as follows:

claim 10 has been rewritten as follows:

10. A thin coating film on a substrate, said thin coating film having a total thickness of less than 3 μm and comprising at least two layers of a layer of (A) a fluorine-containing polymer having hydrophilic functional groups and a layer of (B) a fluorine-containing polymer having no functional group, where the layer of (A) is between the substrate and the layer of (B).

in claim 15, the phrase "Claim 1" on line 1 has been replaced with --Claim 10--, and

in claim 16, the phrase "Claim 1" on line 1 has been replaced with --Claim 10--.

2. The following is an examiner's statement of reasons for allowance.

The invention as claimed is directed to a coated substrate. Independent claim 1 requires the coating to have a thickness of not more than 0.5 μm and consist essentially of a continuous

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layer of a fluorine containing polymer adhered directly to the substrate. The fluorine-containing polymer has a hydrophilic functional group and a crystalline melting point of not less than 200 °C. Independent claim 10 requires the coating film to comprise at least two layers having a total thickness of less than 3 μm . The first layer, which is between the substrate and the second layer, comprises a fluorine-containing polymer having a hydrophilic functional group and the second layer comprising a fluorine-containing polymer having no functional group.

Araki et al. (WO 97/21776) represents the closest prior art. However, Araki et al. do not teach or fairly suggest a substrate coating with a fluorine-containing polymer having a hydrophilic group at a thickness of not more than 0.5 μm . Araki et al. further do not anticipate a multi-layer coating system having a thickness of less than 3 μm that comprises a layer of a fluorine-containing polymer with hydrophilic functional groups and a layer of a fluorine-containing polymer with no hydrophilic functional groups. Moreover, based on the unexpected results demonstrated by the comparison of infrared ray reflectance at 45° between Example 13 and Comparative Example 13, Araki et al. do not render the claims obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (571) 272-1518.

The examiner can normally be reached on Monday through Friday from 9 to 5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (571) 272-1516. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ramsey Zacharia
Primary Examiner
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